

YONEZAWA ET AL. – U.S. Patent Application No. 09/873,408
Attorney Docket No.: 008312-0281351 - RCF: Amendment -

REMARKS

Reconsideration and the timely allowance of the pending claims, in view of the following remarks, are respectfully requested.

In the Final Office Action dated January 20, 2006, the Examiner rejected claims 1 and 5, under 35 U.S.C. §102(b), as allegedly being anticipated by Yamamoto '826 (U.S. Patent No. 6,028,826); and rejected claim 2, under 35 U.S.C. §103(a), as allegedly being unpatentable over Yamamoto '826 in view of Baba '227 (U.S. Patent No. 5,762,227).

By this Amendment, Applicants have amended independent claim 1 to provide a clearer presentation of the claimed subject matter. Applicants submit that no new matter has been introduced.

Applicants respectfully traverse the prior art rejections, under 35 U.S.C. §102(b) and §103(a), for the following reasons:

1. Rejections of Claims 1, 2, & 5 Under 35 U.S.C. §102(b) and §103(a).

As indicated above, independent claim 1 now positively recites the use of a change-over switch means configured to switch an arithmetic processing method in the compensation means in accordance with a tracking control state. Claim 1 further positively recites that the change-over switch means corrects reversion of polarity, when the polarity of a detection signal detected by the tracking detection means is reversed while the objective lens is being tracked to a desired position. These features are amply supported by the embodiments disclosed in the Specification. (*See, e.g.*, Original Specification, page 47, line 14 – page 48, line 8).

In contrast to the Examiner's assertions, there is nothing in either the Yamamoto '826 or Baba '227 reference, whether taken alone or in reasonable combination, that teach or suggest the combination of features recited by amended

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claim 1. In particular, Yamamoto '826 teaches that, for loop gain adjustments in the focusing control system, controller 150 sends a signal to the external disturbance generator 132 to adjust the loop gain in the focusing control system, thereby applying an external disturbance to the focusing control system. When abnormality detector 131 detects an abnormality, such as a lack of RF signal due to a scratch, vibration, or the like, controller 150 sends a signal to the external disturbance generator 132 to stop the output of the external disturbance for measurement. When abnormality detector 131 no longer detects an abnormality, controller 150 resumes sending a signal to the external disturbance generator 132 to output the external disturbance. (See, e.g., Yamamoto '826: col. 15, lines 35-50; FIG. 1, 9A).

In addition, for loop gain adjustments in the tracking control system, Yamamoto '826 teaches that controller 150 sends a signal to the external disturbance generator 134 to adjust the loop gain in the tracking control system, in order to apply an external disturbance to the tracking control system. And, when the abnormality detector 131 detects an abnormality, controller 150 sends a signal to external disturbance generator 134 to stop the output of the external disturbance for measurement. When abnormality detector 131 no longer detects an abnormality, controller 150 resumes sending a signal to external disturbance generator 132 to output the external disturbance. (See, e.g., Yamamoto '826: col. 16, lines 1-9; FIG. 1, 9B).

Based on these disclosures, there is absolutely nothing in Yamamoto '826 that teaches a change-over switch means configured to switch an arithmetic processing method in the compensation means in accordance with a tracking control state, as required by claim 1. In addition, there is nothing in Yamamoto '826 that teaches or suggest that the change-over switch means corrects reversion of polarity, when the polarity of a detection signal detected by the tracking detection means is reversed while the objective lens is being tracked to a desired position, as required by claim 1.

Moreover, Baba '227 fails to correct the deficiencies of Yamamoto '826, identified above. Specifically, Baba '227 teaches the use of a phase compensator 50 for stabilizing the tracking servo loop, a driver 51, a tracking actuator 52, and a driving

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addition point 53 for adding a signal from the adjuster 38 to the tracking servo loop constitute the tracking servo loop. With this configuration, as the two servo loops are ON, the adjuster 38 outputs a driving signal for driving the tracking actuator 52 to the driving addition point 53, and the tracking actuator 52 is driven to oscillate the objective lens 7 within a range of one track. (See, e.g., Baba '227: col. 22, lines 21-39, FIG. 23).

However, like Yamanoto '826, Baba '227 clearly fails to teach a change-over switch means configured to switch an arithmetic processing method in the compensation means in accordance with a tracking control state – much less suggesting that the change-over switch means corrects reversion of polarity, when the polarity of a detection signal detected by the tracking detection means is reversed while the objective lens is being tracked to a desired position, as required by claim 1.

For at least these reasons, Applicants submit that neither Yamanoto '826 nor Baba '227, whether taken alone or combined, teach or suggest the combination of features recited by amended independent claim 1. Applicants therefore submit that claims 1, 2, 5 are clearly patentable over these references. Accordingly, Applicants request the immediate withdrawal of the rejections of claims 1 and 5, under §102(b) as well as the withdrawal of claim 2, under §103(a).

II. Conclusion.

All matters having been addressed and in view of the foregoing, Applicants respectfully request the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of all pending claims.

Applicants' Counsel remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter.

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Respectfully submitted,

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